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| 09/971,812      | 10/05/2001  | Timothy W. Clark     | 4487.26.0           | 4568             |

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INTELLECTUAL PROPERTY GROUP  
FREDRIKSON & BYRON, P.A.  
4000 PILLSBURY CENTER  
200 SOUTH SIXTH STREET  
MINNEAPOLIS, MN 55402

EXAMINER

BERKO, RETFORD O

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1615

DATE MAILED: 12/03/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/971,812

Applicant(s)

CLARK ET AL.

Examiner

Relford Berko

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: .

***DETAILED ACTION***

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph because according to applicant, the claim refers to the weight ratio of sodium diacetate to “said supplement is in the range of about 0.2 to 0.7.” According to applicant, “said supplement” as used in claim 3 refers back to the feed supplement in claim 1. In claim 1, applicant indicates that the feed supplement comprises of a mixture of sodium diacetate and sugar. Therefore it is unclear whether the ratio 0.2 to 0.7 is speaking to: (a) the ratio sodium diacetate/a specific ingredient (b) the ratio of sodium diacetate/one sugar or (c) the ratio of sodium diacetate/total feed (i.e. all other ingredients in the feed).

The rejection may be overcome if applicant clarifies what ingredients are referred to in computing the ratio (0.2 to 0.7) in claim 3.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14 and claim 22 are rejected under 35 U.S.C. 102 (b) as anticipated by Glabe et al (US4, 161, 543).

According to applicant's claim 1, the invention is a method of increasing the feed intake and milk production in lactating dairy animals by administering feed supplement comprising a mixture of sodium diacetate and sugar to the animals.

3. Patent '543 teaches a process of feeding animals, including dairy cows, feed supplement containing sodium diacetate and whey in order to increase milk production: whey is mainly carbohydrate containing lactose, and dextrose (abstract, col 2, lin 45-55; col 6, lin 10-20 and col 7, lin 15). The disclosures in Glabe et al (Patent '543) render applicant's claims 1-14 and claim 22 anticipated.

4. Claims 1-14 and claim 22 are rejected under 35 U.S. C. 102(b) as anticipated by Galbe et al (US 4,196,194). As in claim 1, Patent '194 teaches an invention in which a method is described wherein dairy cattle is fed with a composition containing sodium diacetate and carbohydrates from many sources (corn silage, whey, hay) that increases milk production in the animals (abstract, col 1, lin 20, col 2, lin 1-40 and col 4, lin 45-50). The disclosures in Patent '194 render applicant's claims 1-14 and claim 22 anticipated.

5. Claim 1-14 and claim 22 are rejected under 35 U.S.C. 102(b) as anticipated by Glebe et al (US4, 015,018). As in claims 1-14 and claim 22, Patent '018 teaches a composition that is fed to dairy cattle and other ruminants, such composition containing corn, sorghum, dehydrated whey and bentonite in addition to sodium diacetate. The feeding of the composition to dairy

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cows was found to increase milk production (abstract, col 6, lin 10-60). Claims 1-14 and claim 22 are anticipated by the disclosures in Patent '018.

### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glabe et al (US 4, 015, 018) in view of Glabe et al (US 3, 925, 559).

8. According to applicant, claims 15-32 are drawn to a feed supplement for increasing milk production and weight in dairy cattle. The feed contains varying amounts or ratios of sodium diacetate and sugar, that the sugar could be a monosaccharide (e.g. glucose) or a disaccharide (e.g. sucrose or maltose). The feed also contains differing amounts or ratios of bentonite, brewer's yeast or sodium bicarbonate wherein the amount of sodium bicarbonate is not greater than 50%.

9. A patent issued to Glabe et al (Patent '018) teaches a composition containing sodium diacetate and whey. Patent '018 teaches that the quantity of sodium diacetate whey composition can be varied varying amounts of diacetate per tonnage of feed (abstract and col 6, lin 60-65; continuing to col 7, lin 1-5). However, Patent '018 does not teach specific ratios of sodium diacetate/sugar content or other ingredients in the feed; neither does Patent '018 teach the advantages of using various amounts of diacetate in the feed.

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10. Patent '559 teaches the use of specific amounts of sodium diacetate in preparing the feed composition and points out that sodium diacetate in small quantities are used for increasing the taste of feed and making such feed attractive to the animals (col 2, lin 40-60 and col 3, lin 10).

11. One of ordinary skill in the art would have been motivated to vary the amounts of ingredients in the feed composition by varying the ratio of sodium diacetate to carbohydrates in order so as to obtain a feed composition that is most attractive to dairy cattle and thereby allow the cattle to feed for prolonged periods and to increase both the weight of the animals milk. One of ordinary skill would have expected to vary the contents of sodium diacetate to whey contents of the feed render the feed impervious to mold growth (Patent '559, col 4, lin 60-65, continuing on to col 5, lin 1-10). Therefore the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) Glabe et al (US 4, 016, 294) teaches animal feed composition containing sodium diacetate as an attractant (abstract). Patent '294 also teaches that as the amount of corn moisture increases from 22% wt to 32% wt, the amount of sodium diacetate would be increased from 0.8% by wt to 1.5% by wt.

(b) Glabe et al (US 4, 338, 336) teach an animal feed composition containing sodium diacetate used for feeding herbivorous animals including cattle (abstract) that was effective in raising the feed time for the animals (col 4, lin 35).

### **Correspondence**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Retford Berko whose telephone number is 703-305-4442. The examiner can normally be reached on M-F at 8:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9903 for regular communications and 703-746-9903 for After Final communications.

An inquiry of a general nature or relating to the status of this communication or proceeding should be directed to the receptionist whose telephone number is 703-308-1243.

  
THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600